



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## BIMETALLISM IN FRANCE.

SO large a space in the silver debate of the past fifteen years has been assigned to the example of France, that I am moved to a particular examination of that matter. It has been repeatedly said and scarcely questioned that France adopted the double standard in 1803 at the ratio of  $15\frac{1}{2}$  to 1 and maintained it till 1873, and that during all that time gold money and silver money circulated there side by side. This example has been constantly used as evidence to show that the United States might safely adopt a double standard now. That a concurrent circulation of the two metals is entirely possible, has become a conviction with many who would be opposed to the free coinage of silver if they were convinced that gold would be driven out of the circulation. I shall show that France did not adopt the double standard in 1803, and that she never had a concurrent circulation of the two metals except at brief intervals when the market price of gold happened to be about  $15\frac{1}{2}$  times that of silver.

The French monetary law of 1803 and several of the documents leading up to it were collected and published by Chevalier, in the year 1859, as an appendix to his work entitled *Baisse probable de l'or*. The same writer in another work<sup>1</sup> has given us a review of these documents, showing that the public authorities of France supposed that they were adopting, and did in fact adopt, the single silver standard in the act of the 7th Germinal, year XI (March 28, 1803). Mr. Dana Horton, in his valuable appendix to our government's *Report of the Paris Monetary Conference of 1878*, supplies two documents of earlier date than those reproduced by Chevalier. One of these is Calonne's defence of himself against the charge of fraud in connection with the French recoinage of 1785. The other is the report of the monetary commission of 1790 to the National Assembly.

<sup>1</sup> La Monnaie, 2d edition, pp. 195-222.

Let us first glance at the law of 1803 itself. It consists of twenty-two articles consecutively numbered under two titles. The first title is "Of the Fabrication of Coins," the second is "Of the Verification of Coins." But before the first title stand these words :

General Provision. Five grams of silver, nine-tenths fine, constitute the monetary unit, which retains the name of franc.<sup>1</sup>

The French heading, "*Disposition Générale*," is commonly translated in English publications as "General Dispositions." Apart from the fact that the noun substantive here used is not plural, the English word "disposition" does not express the meaning of the French word when used as a law term. Fleming and Tibbins give the meaning thus : "*point que règle ou que décide une loi*; provision, proviso, stipulation." Therefore it would be correct to consider the first paragraph as a "general provision" to which all the others are subordinate and special, even if we had nothing else to guide us. This general provision is that a certain weight of silver of a certain fineness is the monetary unit, which shall govern everything else in the law. Now what was to be done with gold? Title I tells us in these words :

Article 6. There shall be coined gold pieces of 20 francs and of 40 francs.

Article 7. Their fineness is fixed at nine-tenths fine and one-tenth alloy.

Article 8. The twenty-franc pieces shall be struck at the rate of 155 pieces to the kilogram, and the forty-franc pieces at that of 77½.

There is an interesting history connected with this legislation. My thesis is that the legislators of France intended to establish, and did establish, the single silver standard, instead of the double standard which had existed down to the time of the Revolution, and that they intended that the gold money should be recoined whenever the market ratio should sensibly vary from that of 15½, but that this intention was never carried out.

<sup>1</sup> "Disposition Générale. Cinq grammes d'argent, au titre de neuf dixièmes de fin, constituent l'unité monétaire, qui conserve le nom de franc."

Under Article 8, five hundred grams of gold would be coined as 1550 francs. Under the general provision five hundred grams of silver would be coined as 100 francs. Thus the ratio would be  $15\frac{1}{2}$  to 1. Chevalier says that this was the relation really existing in the market at the time.<sup>1</sup> Professor Bowen, in his minority report of the United States monetary commission of 1876 (page 146), says that it was not exactly the market ratio. He puts the difference at one per cent. Mr. Dana Horton, in the official report of the Paris Monetary Conference of 1881, says :

At London, as we have already noted, the price of gold rose above 15.21 in 1798, while for Hamburg Soetbeer gives for the period immediately preceding 1803 an average of about 15.40, while for 1802 he gives the rate of 15.26. Evidently we have here the well-known phenomenon of local prices. [Page 173.]

It should be noted in passing that the ratio of  $15\frac{1}{2}$  to 1 had been fixed by King Louis XVI for the recoinage of gold in the year 1785, Calonne being then comptroller-general of the finances. The legal ratio of  $14\frac{2}{3}$  which had existed from 1726 had so far departed from the market ratio that gold had almost wholly disappeared from the French circulation. If any gold money was to be retained, recoinage was necessary at a new ratio. Calonne decided to adopt that of  $15\frac{1}{2}$ . He was afterwards attacked with various charges of misconduct, including that of frauds in the recoinage. Talleyrand says in his *Memoirs*, recently published, that Calonne was not familiar with this subject himself, but that he followed the advice of a broker named Madinier. He adds that the recoinage was necessary and was not fraudulent, and that the charges brought against Calonne were a part of the political intrigues of the time. Calonne himself enumerated the recoinages that had taken place from the reign of St. Louis to his own time, and claimed that his was the only one that was not undertaken with the motive of replenishing the treasury at the expense of the people. In support of the ratio of  $15\frac{1}{2}$ , which he had chosen, he cited quotations from

<sup>1</sup> La Monnaie, p. 216.

the metal market to show that the true ratio at the moment at Paris was  $15\frac{1}{8}$ . But the legal ratio in Spain, he said, was  $15\frac{1}{8}$ , in Portugal  $15\frac{3}{4}$ , in England  $15\frac{1}{4}$ , and looking at the advancing tendency of gold and at the example of surrounding nations, he thought that  $15\frac{1}{2}$  would be a happy medium, and would for a long time avoid the necessity of another recoinage. The recoinage of 1785 did, however, make a serious disturbance in the circulation at the moment, pushing silver out of the country to such an extent that the monetary commission of 1790 recommended another change in the ratio, *viz.*, to  $14\frac{1}{2}$ .

The fact that the ratio of  $15\frac{1}{2}$  had been chosen in 1785 and was actually existing in the coinage of France had some influence in determining the ratio in 1803, but was not actually decisive. What was decisive was the fact that there were at that time no signs of speculation in either of the metals tending to carry one or the other out of the circulation.

## I.

We shall first examine the report of the monetary commission of 1790 (that of Fortbonnais), for the reproduction of which we are indebted to Mr. Horton. Much of this document, as of all the others, relates to the legal and market ratios, showing how difficult it was to bring them into harmony and keep them there, and how mischievous were the consequences of their falling out of harmony. One point set out with clearness in this report is that gold is the favorite metal of commercial nations because it is easy of carriage, and that every such nation can get all the gold it requires without having mines of its own. At the same time, it was said :

The territorial extent of France, her population, and the mode in which her manufactures are for the most part carried on, with small capital, indicate the need of preferring the metal which best adapts itself to division into small parts [*i.e.* silver].

After adverting to the fact that it is a physical impossibility to tie the two metals together by a legal ratio, the report continued :

Gold, being transportable more easily and at less expense than silver, is on that account more variable in the march of commerce and dependent upon causes which render the yellow metal scarce or plenty ; wherefore silver appears to be rightfully entitled to be considered in France as the *invariable term of comparison*.

The commission recommended that gold coins should be made legal tender at rates to be fixed from time to time according to the course of trade, but they postponed the consideration of details for carrying this plan into effect. This idea of a silver standard, with gold as a subordinate metal, and with postponement of details, reappears again and again, and is finally enacted, postponement and all, in the law of 1803.

But parallel with this investigation and report on metallic money there was going on in the same body an investigation into the virtues of paper money. The first issue of *assignats* (400 millions) was made in April, 1790. The second (800 millions), which was to be positively the last, was made in September of the same year. Thenceforward the stream ran with increasing velocity until February, 1796, when 36,000 millions were in circulation. At this time one franc in coin was worth 288 francs in paper, although there was a law in force making it a crime punishable by six years' imprisonment in irons to allow any difference in trade between coin and *assignats*. Then came the *mandats*, which ran their brief career, at the end of which both *assignats* and *mandats* were repudiated. This event took place in July, 1796.

Meanwhile there had been enacted certain laws relating to the establishment of the metric system, of which it was intended that the monetary system should be an integral part. Thus by the decree of the National Convention, dated August 1, 1793, it was declared that the monetary unit should be a piece of silver weighing the hundredth part of the *grave*, the name then given to the kilogram. Next came the law of the 18th Germinal, year III (1795), which says that "the unit of money shall take the name of *franc*." Then followed that of the 28th Thermidor, same year, which enacts that the monetary unit shall henceforth bear the name of franc ; that the fineness of silver money shall

be nine parts of that metal and one part of alloy ; and that the pieces of one franc shall be of the size of five grams—not ten grams, as the act of 1793 had contemplated. This law authorized the coining of gold pieces, nine-tenths fine, weighing ten grams, but did not fix their monetary value.

All these laws and the final act of 1803, Chevalier tells us, were founded upon the memoir of Mirabeau, which bears date December 12, 1790. The part which concerns us is found in the preamble of the decree proposed by Mirabeau, in these words :

That, money being the measure of everything that is sold, this measure ought not only to be invariable, but also to have the same relations in all its parts, which cannot be if gold and silver are employed conjointly as constitutional measures, because the proportion between these metals is very susceptible of variation, and therefore one metal only ought to serve as the measure, or as constitutional money.

That, one metal only not being susceptible of division sufficiently to serve as the measure of things of the lowest price, or convenient to be the measure of those of great value, it is necessary to adopt other monetary signs, which shall only be additional signs and representative of constitutional money.

Mirabeau's plan was to coin gold pieces of 10, 20 and 50 livres at the existing ratio. As they were not to be legal tender, they would pass for what they were worth from time to time, being merely commercial money, like the gold coins of Austria, Russia and India at the present day.

The next document of importance is the report of Prieur, of Côte d'Or, to the Council of the Five Hundred, in the name of the committee on finance of that body, dated 17th Ventose, year VI (1798). This was under the Directory. Although rather bombastic in its exordium, this report is not in the least obscure. Prieur considers the monetary value of silver as already fixed, and assumes that the only question open to debate is, how the commercial variations of gold in reference to silver shall be treated.

The franc [he says], representing a specified weight of pure silver, has been considered as the unit of value, to which all other values

should have relation ; that of a given weight of gold, and consequently of our piece weighing ten grams, remains undetermined.

Two methods were open to consideration : (1) to preserve the same nominal value, changing the weight or fineness from time to time as necessary ; or (2) to preserve the weight and fineness and leave the coins to pass for what they were worth. The former was that practised under the monarchy, but it led to innumerable frauds in the recoinages. The second was much to be preferred upon grounds of justice. "Our actual legislation conforms to it. The wish of the Directory is to see it confirmed ; so likewise is that of the Minister of Finance and of the merchants called together for consultation on the subject."

Some difficulties presented themselves to the minds of the committee in reference to the collection of taxes. It was necessary to avoid disputes between the collectors and the taxpayers and also between the state and its creditors. Such disputes would naturally arise if the public dues were liable to variation according to the market relation of gold to silver. Private parties would have no difficulty in making their bargains and adjusting their contracts, but with regard to the state the case was different, the taxes being assessed at a fixed sum in advance of collection, and the disbursements being arranged on the basis of the taxes. For the purpose of regulating the payments of gold into and out of the public treasury, the report recommended that the treasurer should publish on the first Vendémiaire and the first Germinal in each year the value of the ten-gram gold piece, based upon the average commercial price of gold in Paris during the preceding six months, this value to govern public transactions during the next six months. Private transactions were to be left to regulate themselves. Prieur mentions casually that the ten-gram gold piece varied in price from the month Pluviose, year V, to the same month, year VI, as much as 1 franc 5 centimes. While ascribing a large part of this variation to extraordinary circumstances, he pointed to it as convincing proof that such changes in the value of the metals could not be safely disregarded.



Article 5, section 1, of the decree proposed by the committee was in these words :

The legal value of the gold pieces shall not be fixed ; it shall vary as the price of gold bullion in the market. Consequently citizens may pass gold pieces at the rate stipulated between themselves according to agreement.

But in order to prevent abuses and embarrassments *in the public service*, the legal currency of the gold pieces for each half-year shall be equal to the mean commercial price at Paris during the preceding six months.

Article 6 contained the provisions for carrying the latter clause into effect. In the course of the debate which followed in the Council of the Five Hundred the committee withdrew these two articles and stated that they would present a special measure for regulating the value of gold coins. The bill that they presented was passed on the 4th Floreal, articles 5 and 6 being omitted. It provided for the coining of silver pieces of the denomination of half-franc, one franc, two francs and five francs, and of gold pieces weighing ten grams and having this weight stamped on them. The bill was then sent to the Council of the Ancients.

The report of Crétet, chairman of the committee to which the subject was referred in the latter body, bears date the 12th Messidor, same year. Crétet was afterwards governor of the Bank of France and Minister of the Interior. He begins by saying that the monetary system is already grounded upon the franc, and that this is a piece of silver weighing five grams, nine-tenths fine. This piece, he continues, with its fractions and multiples, will always be worth as money exactly one franc, whatever may be the intrinsic value of the metal of which it is composed, even though circumstances may in the future raise or depress it. This is the fixed point of the system. Concerning the gold piece, he observes that the bill does not declare what shall be its legal and monetary value. If this were an oversight he would content himself with merely drawing attention to it ;

but we know, by the report of our colleague Prieur and by the discussion that has taken place in the Council of the Five Hundred, that this

silence on the subject of the gold piece is a sort of indirect adjournment of the determination of the legal value of gold money.

Crétet considers that such adjournment would involve very troublesome consequences. If gold is deprived of legal value, how can any one be required to receive it? Will there not be disputes as to its value at each transaction? Shall we doom our citizens to minute calculations in their daily trading such as are customary among the Jews and the Chinese? Let us not lose sight of the fact that our most important traffic, that of agricultural products, is carried on with gold exclusively, and that "if gold serves the vile passion of hoarders, it also supplies the most active and useful circulation, since it is employed in the grain and cattle trade." If the adjournment of the definite solution touched only the new gold pieces, the delay might be endured, but it goes much beyond that, since it leaves undetermined the legal rating of the louis d'or, so that within three months after the promulgation of the law all the gold in the country will be demonetized. Then a louis will be a mere article of merchandise, and nobody can pay his debt with it except after a dispute and perhaps a lawsuit. The legal value of gold pieces, both old and new, ought to be fixed; but since the actual value is variable, the legislative body ought to declare it from time to time.

For example [says Crétet], we might at first declare the ratio of gold to silver as 1 to 16, which would give a legal value of thirty-two francs to the new gold piece and almost twenty-four francs to the louis d'or. The Directory would be charged each year to give its advice to the Corps Législatif upon the expediency of changing the legal value of the gold pieces, old and new, from which would follow a law declaring the change. Thus would be preserved all the influence that gold money can exercise by its free circulation. The Corps Législatif would reach its conclusion by an average deduced from the relation of gold to silver among the principal nations of Europe.

The Council of the Ancients had no power to amend bills sent to them by the Council of the Five Hundred; they could only adopt or reject. On the recommendation of the committee, this bill was rejected.

## II.

Next in order is the first report of Gaudin, Minister of Finance under the Consulate. It is dated September, 1801. Gaudin gives a catalogue of all the money in circulation, gold, silver, copper, bell metal and base silver. We will omit these and other matters of detail. Gaudin remarks casually that silver is actually the base of the French monetary system and that the value of this metal will govern that of gold in the plan that he has to propose. Under the heading: "Whether we should maintain the decree of the 28th Thermidor, year III, which gives to the gold piece fixity of weight and mobility of value," he says:

The National Convention, by its decree of the 28th Thermidor, year III, ordained the fabrication of the gold piece and fixed its weight at ten grams, nine-tenths fine and one-tenth alloy. It follows from this law that the money value ought to be from thirty-one to thirty-two francs. It was thought that to prevent the necessity of a recoinage of gold it was best that the gold pieces should have fixity of weight and mobility of value. But this is only fair to the eye; in practice it bristles with difficulties that force me to propose its rejection.

The cost of recoinage would be a trifle, he thought, in comparison with the bother of resorting to the pencil every time payments were made with gold. Moreover, he did not think that the necessity of recoinage would come oftener than once in fifty years. The expense, when it did come, would not be more than one-half of one per cent, and this, when distributed among the fifty years, would be only the hundredth of one per cent per annum. What is this in comparison with the task of computing fractions in making payments with gold, varying from day to day? He repeats:

The basis of our money is the franc of silver. Its weight is fixed at five grams, nine-tenths fine. Everything should be relative to one franc. Pieces of higher value should be composed of several francs without any fraction.

He reiterates in several places the idea that the silver franc is the unchangeable thing in French money, and in his project of law he fixes it thus :

Article 1. Silver shall be the basis of money of the French Republic ; its fineness shall be nine-tenths fine and one-tenth alloy.

\*            \*            \*            \*            \*            \*            \*

Article 6. The ratio of gold to silver shall be 1 to 15½. A kilogram of gold shall be valued at 15½ kilograms of silver. If imperative circumstances require a change in this proportion, the gold pieces only shall be recoined.

Gaudin's bill was referred to the section of finance in the Council of State, of which Béranger was the reporter. Béranger's first report, dated the 10th Thermidor, year X (1802), is brief. It betrays evidence of a difference of opinion among the members of the section as to the treatment of gold, but no difference as to that of silver. All were agreed that silver should be the principal money and that the monetary unit should always be equal to five grams of silver, nine-tenths fine, and that the value of gold pieces should be measured by that of silver money. How should this measuring be effected? The section could not agree to Gaudin's plan of recoinage whenever the course of events should bring about a sensible change in the market ratio. Of all the arrangements talked of, it considered this the most contrary to sound principles. Béranger was possessed of one idea which he propounded with great earnestness, namely, that certainty, fixedness, invariableness in the standard of value, was the prime consideration in commerce. This did not mean, as he showed in his second report, that the value, or exchange power, of the metal chosen for the standard should be always the same, so that five grams of silver should always command a given amount of commodities, but that the buyers and sellers should always know exactly what they were to pay or receive. It was to be five grams of silver and nothing else. It was not to be five grams of silver to-day, and something else to-morrow, and five grams of silver the day after. To show how the element of certainty promoted commerce and prosperity, he pointed to the banks of deposit as distinguished

from banks of discount, the function of the former being to create an invariable money of account by receiving every sort of current money and boiling it down to one standard, so that people trading with bank money could always know exactly what they would get.

Thus, the banks of deposit do not multiply commercial bills like banks of circulation; they do not make advances to merchants; they have no other sensible advantage than that of fixing the value of money; but this advantage is such that all the places which have possessed them have become the centres of a great commerce. Banks of deposit, and the benefit that they bring, are limited to certain localities; the only means of supplying them in a great empire, and of adding their results to those of the banks of circulation, consists in creating a current money as invariable as the bank money. It is necessary then to choose either gold or silver in order to give *one type* to the money of account, and if the latter obtains the preference, to abandon the value of the gold pieces to all the variations of commerce.

This plan of leaving the value of the gold pieces to be regulated by commerce had been rejected by the section of finance, but it appears from Béranger's second report that he personally favored it. They had also rejected Gaudin's plan of occasional recoinage. As they had agreed upon the single silver standard, it followed necessarily that they favored the plan of changing the legal value of the gold pieces from time to time by legislative or administrative action. This idea was thrown out tentatively by Béranger in his report, but without any details for carrying it into execution. In short, the section of finance had got back to the ground occupied by Fortbonnais and the commission of 1790, and had stopped just where they stopped.

The Consuls were evidently puzzled by such a report, for they referred the subject back to the Council of State with certain specified questions, upon which Béranger made a second report, dated the 17th Fructidor, same year. The first and second questions were these:

1. Shall the monetary unit be represented by one metal alone, or by more than one; by a quantity of gold and of silver equally variable, or by a fixed quantity of silver and a variable quantity of gold?

2. If the monetary unit be represented by one metal alone, to which should the preference be given?

To answer these questions Béranger goes deeply into the science of political economy. He lays down as principles that the utility of money consists in its power to facilitate and multiply exchanges, that the money best adapted to the promotion and multiplication of exchanges is that whose value is most invariable, that the value of money is independent of legislation, and that legislation should be limited to precautions whereby the value of money may be most surely and easily recognized by the public. He draws the distinction between value and utility, and also between legal value and economic value. The economic value of money, he says, depends upon circumstances in the natural world. It is liable to change. Both debtor and creditor are exposed to the consequences of its fluctuations, but they cannot be avoided. We must accept the fact and minimize its evils as much as possible. Two metals, he argues, will change in value oftener than one. Therefore one only should be chosen as the legal measure of value. If we choose two, it will be necessary to change the ratio from time to time, and

with the disposition that all governments have to debase money, the lowest value will always be taken as the measure; they will fall back alternately from gold to silver and from silver to gold, and sink from the franc to the seventy-sixth part of a franc, as they sank from the livre to the seventy-sixth part of a livre.

The money of account, the report continues, should be represented by one metal only, because foreigners will be attracted to French markets if they know exactly what they have to pay. France will thus gain an advantage over countries whose legislation is more arbitrary and more complicated. To the objection that this will be an innovation and that it is opposed to the legislation of *all European countries*, Béranger replies that that legislation dates from a time anterior to the discovery of the two Indies; that it is antiquated and out of harmony with existing facts. It should be remembered that under this old legislation in France the rating of the mark of gold or the mark of silver,

between the years 1602 and 1773, had been changed twenty-six times by the government, not to mention the secret regulations by which the fineness had been altered. France had perhaps been more sorely tormented in this respect than any other country, but all had suffered more or less. Nobody but a few writers had thought of putting an end to such disorders by deciding which metal should serve as the point of comparison for the other. Nevertheless the force of things, which though silent never ceases to work, had now and then corrected legislation by usage. Thus banks of deposit had been established to preserve a fixed value for payments determined by an invariable weight of metal, the current money being received on deposit only by its weight. "The law," he says, "authorizes contracts in bank money and consequently authorizes the weighing of coins, although an earlier law enjoins us to receive them at their presumed weight." He cites examples to show how little the force of law avails to make money current. In Holland the *zuyder*, which is a gold coin, is legal tender, and the *ducat*, another gold coin, is commercial money. The *ducats* circulate in abundance, but the *zuyders* are hardly ever seen. In Sweden the gold *ducat* has a legal value that has fallen into desuetude, but it circulates at its commercial value. On the frontiers of all European countries the coins of the neighboring states are received by everybody and without difficulty, although legislation gives them no assistance.

Having settled the point that one metal only should be the standard, he takes up the second question and decides that the metal should be silver. The reasons for this decision are that the total value of silver is greater than the total value of gold, that it constitutes the greater part of French money, that it is less subject to accidental variations of value, that existing laws make silver the money of account and that the laws of Spain favor the importation of silver from that country rather than gold. Béranger favored the coining of gold pieces of ten grams and leaving them to find their own value in trade; but to avoid incidental difficulties, he suggested that they should be received at the public treasury at a fixed rate determined by the mean value of gold in the market.

If the market value for the moment is below the rate at which they are received, they will accumulate in the treasury and become scarce in the circulation. Then they will rise in value and people will be glad to draw them out again. If the fall of gold proves to be real, the government will be apprised of it by the collections in the treasury, and will change the rate. If it rises, the government will be obliged to buy in the market whatever amount of gold it needs and will again change the rate.

The second report of Gaudin, dated the 26th Brumaire, year XI (1803), is supplementary to his first, and is for the most part a reply to the views of the Council of State as set forth by Béranger. That there ought to be gold pieces in the circulation Gaudin considered settled by the needs of the grain and cattle trade and by custom and public opinion. "Ought the gold pieces to have a value determined by law or should they be left to the regulation of commerce?" Gaudin thinks that the same reasons which require gold money at all require that it should have a determined value in trade. How otherwise could the countryman who had brought his cattle to the market know that he was getting the real price that he asked for them? How easy it would be to cheat him at every turn! It may be said that in any case he receives only the bullion value, since foreigners will take your money only at its market price. That was not a sufficient objection, Gaudin thought, since the aggregate amount of transactions with foreigners was small as compared with those of the internal trade. It was not reasonable to expose our own people to trouble in keeping their accounts, under the pretext that foreigners would not pay attention to the legal value of our money. As for Béranger's plan of fixing a rate at which the ten-gram pieces should be received at the public chest, he did not think that it would work at all. What is meant, he asks, by "the mean value of gold in the market"? Is it the mean value of a month, or of three months, or of some other interval? Is it the market of Paris, or of all France, or is it the average of these combined with foreign markets? But suppose this point settled, practical difficulties would arise in the execution of the law. Changes of market value, changes of



the treasury rate, the difficulty of communicating with the receivers of taxes throughout the country and of settling their accounts afterwards, — all together made the plan, in his view, impossible of execution. In its stead he proposed that gold pieces of twenty and of forty francs should be coined, as being adapted to the wants of the people, to the ease of keeping accounts and to the ideas prevailing in the nation.

What should be the ratio between gold and silver? Gaudin gives various reasons for the ratio of  $15\frac{1}{2}$ . The first and controlling one is that there is no evidence of speculation in gold under that ratio. Another is that recoinage would be very expensive to the owners of gold.<sup>1</sup> At all events, he says, the legal value of gold pieces should determine their weight, instead of the weight regulating the value.

*But under one system or the other the monetary unit would be equally represented by a determined quantity of silver,* this material having the preference because it constitutes much the greater part of the money of the Republic.

<sup>1</sup> In this second report Gaudin says: "This system [the proportion of 15 to 1] appeared seductive to me from various points of view, but without intending to decide opinion upon a point which has been the subject of so many controversies, I will observe that since 1785 there has been no occasion to remark that the proportion of  $15\frac{1}{2}$  has brought about speculations to bring gold to us and to carry away our *écus*, and that the price of gold in commerce has always been relative to the price of gold at the mints; but it has seemed to me that it might be useful to consider this same question from a point of view having particular reference to the circumstances in which we are placed.

"It may be possible that the proportion of one-fifteenth would adapt itself with a more rigorous exactness both to the proportion which obtains in that one of the neighboring states to which we have the greatest interest in adapting ourselves [England], and to our new system of weights and measures; but it is not demonstrated to me, as I have already remarked, that in maintaining our present proportion, that of  $15\frac{1}{2}$ , we should be exposed to sensible inconvenience; while, according to calculations of the administration of the mint, the adoption of the proportion of one-fifteenth would make an enormous difference in the position of the owners of gold, which would now have to be recoined. In fact this difference would be somewhere from 1,800,000 francs to more than 24,000,000. Now such a difference would appear to require that the inconvenience of not changing our actual proportion should be proved by indubitable evidence before it is determined to relieve it by so great a sacrifice. A profound discussion can alone conduct to the solution of a question of so high importance.

"Provisionally I think that I ought to persist in the propositions that I made in my first report, both for the proportion of  $15\frac{1}{2}$  and for the coinage of twenty and forty franc pieces," *etc.*

In his former report Gaudin had recommended that the gold pieces should be recoined whenever circumstances should require a change in the ratio. He does not refer to this matter in his second report, but as this was only a supplement to the other, being an answer to that of Béranger, it was not necessary to repeat what he had already argued at great length.

The last document of the series is the *exposé des motifs* which accompanied the bill in the legislature. This paper was drawn up by Béranger. The text of the bill shows that the section of finance had at the last moment adopted Gaudin's view on the disputed point, *i.e.* gold pieces of twenty and of forty francs, to be recoined whenever necessary. But nothing was said in the bill itself about future recoinage. That was left to future legislatures, which would have all the powers that this one had. If there could be any remaining doubt as to the intention of the framers of the law of 1803, the *exposé des motifs* would resolve it, the second paragraph of which says :

This bill is in some sort preceded by a general provision (*disposition générale*), which tends to prevent the depreciation of the standard and to lead back toward *a fixed point* all the variations of value that may occur between the metals used in the making of money. From this results a guaranty for the execution of commercial transactions and the security of property, *that we do not find in the legislation of any other people.*

We have already seen what this *disposition générale* was. It is here spoken of as something which precedes the bill and also as something which tends to lead back to a fixed point all variations between the metals. That fixed point was five grams of silver, nine-tenths fine, which had under a former law (that of 1795) received the name of *franc*. What was it that they did not find in the legislation of any other people? It was the single standard. There were double standards in plenty. The report of Fortbonnais mentions thirteen such in Europe, giving the ratio of each. France herself had had the double standard in law and in theory, until 1795. She had abandoned it provisionally then. She now abandoned it definitely and adopted the single silver standard, using gold as an auxiliary and subordinate metal.

The wording of the law underwent several changes in the Council of State, but the idea of the single standard was never departed from. One wording provisionally adopted on the 16th Nivose, year X, said: "The franc, that is to say, the monetary unit made of five grams of silver, nine-tenths fine, is the invariable measure of gold money and of copper." Another (10th Frimaire, year XI) said: "The franc is the invariable measure of money made of any different metal."

According to Chevalier,<sup>1</sup> the assertion was made in the French monetary commission of 1857, which was appointed to consider the questions raised by the influx of gold from California and Australia, that the law of 1803 was the result of a compromise between two contradictory opinions, one favoring the single standard and the other the double standard. The truth of this statement Chevalier flatly denies, and he challenges anybody to find a line in the official papers from 1790 to 1803 in favor of the double standard, or any evidence of the existence of two contradictory opinions on this point. Having gone over these papers independently, I am able to confirm what Chevalier says, although of course my assertion adds nothing to the weight of his. The only contradictory opinions revealed are those relating to the method of using gold in an auxiliary and subordinate capacity. Twelve years of ardent pursuit failed to secure a solution to this problem. Let us here recapitulate the several recommendations:

1. Fortbonnais' report, 1790: Single silver standard; gold to be legal tender at rates to be periodically fixed according to its market value.

2. Memoir of Mirabeau, 1790: Single silver standard, with gold pieces as commercial money.

3. Prieur's report (Council of the Five Hundred), 1798: Single silver standard; gold as commercial money, the rate at which it should be receivable for taxes to be fixed each half year.

4. Cr  t  t's report (Council of the Ancients), 1798: Single silver standard; gold pieces to have their legal value fixed each year by legislative decree based on market value.

<sup>1</sup> La Monnaie, p. 202.

5. First report of Gaudin, Minister of Finance under the Consulate, 1801: Single silver standard; gold pieces of twenty and of forty francs at the ratio of  $15\frac{1}{2}$ , to be recoined whenever the market ratio should sensibly vary.

6. First report of Béranger (Council of State), 1802: Single silver standard; gold pieces whose legal value should be changed from time to time by legislative or administrative action — Béranger personally preferring that they should be commercial money only.

7. Second report of Béranger, 1802: Single silver standard; gold pieces as commercial money, but to be received at the public treasury at fixed rates to be determined from time to time.

8. Second report of Gaudin, 1803: Additional to but not different from his first report.

9. *Exposé des motifs* in the Corps Legislatif, 1803: Single silver standard; gold pieces of twenty and of forty francs at the ratio of  $15\frac{1}{2}$ , as recommended by Gaudin; no definite provision for changes in market value.

It is not necessary to say anything more about the intention of the legislators. The question will be asked how and when gold came to be legal tender money in France. The law of 1803 does not expressly declare what shall be legal tender, nor does it expressly authorize the unlimited coinage of either metal. But all money debts in France are payable in francs, and the law does expressly declare that the franc is five grams of silver, nine-tenths fine. Mr. Horton's attention was directed to this point in 1878, and he then expressed the opinion that no dispute had ever arisen in France by which the right of unlimited coinage (which includes the legal tender question) was ever tested. The only time after the passage of the law of 1803 when a dispute could have arisen touching the legal tender faculty of gold would have been the brief period (about 15 years) when the influx of gold from California and Australia had depressed the market ratio somewhat below  $15\frac{1}{2}$ . At no other time would it have been worth while for any French creditor to insist upon payment in silver. It is useless to speculate what the French

courts would have decided if such a case had been brought before them. But if the intention of the legislators had been sought in the history of the law, anybody who had demanded silver would have been able to enforce his demand.

It may be asked why the French legislature did not follow out the intention of recoining the gold pieces when the market ratio changed in a sensible degree, as it did within a few years. Chevalier answers this question. He says that governments always have more work on hand than they can perform, and that consequently they only attend to the things of pressing importance. The thing of pressing importance in France during the next dozen years was war. No wonder that the coinage question was forgotten in that tremendous clash of arms, although the market ratio had materially changed.

It may be said that the practical effect and the actual course of events after the year 1803 were the same as they would have been if the double standard had been adopted in set terms. I fully agree to that and will show presently what the course of events was. But let us get our historical bases right first. I object to the assumption that the French people, after having the so-called double standard imposed upon them for centuries, and after having suffered untold evils from it, deliberately re-adopted it after they had gained freedom of action through the Revolution. In fact, they scouted it and rejected it with one accord. The single standard was agreed to by everybody :

by the government, by the political bodies, of which the most influential was the Council of State, by the Commission on Money (an administrative body composed of *savants*), and by the Institute, whose advice the government of that period habitually sought in cases where its competence was acknowledged.<sup>1</sup>

### III.

Let us now inquire whether the law of 1803, *or anything else*, enabled France to enjoy a concurrent circulation of the two metals. All the writers and statesmen whom we have examined, without a single exception, affirm that it is impossible to

<sup>1</sup> *Revue des Deux Mondes*, April 1, 1876.

tie the two metals together by a legal ratio. They all drew their opinions from the experience of France. Béranger tells us that there had been twenty-six changes in the coinage between the years 1602 and 1773. Most of these changes were prompted by the cupidity or the necessities of the government, but it was the varying ratio of the metals in the market that furnished the excuse for them. So says Fortbonnais, and he makes this one of the reasons for abandoning the double standard; for then, says he,

we shall see no more of these disastrous recoinages, where the pretence of obeying the behests of trade has given the pretext by which the business community have been ground under the heel of treasury extortion, by which specie has been debased or fictitious values substituted for an actual weight of fine bullion, of which the people have been robbed in order that they [the government] should be the gainers.

Calonne, in his defence of himself against the charge of fraud in the recoinage of 1785, says that the old ratio of 14 $\frac{1}{8}$ , although it had stood the test of time remarkably well, had latterly drained the kingdom of its gold coin: "Everybody knows," he says, "that hardly any more gold was to be seen in France and that it had become infinitely rare in Paris." Adam Smith, who had travelled in France in 1764-66, confirms this statement, saying: "It is there difficult to get more gold than what is necessary to carry in your pocket."<sup>1</sup> The Fortbonnais report (1790) says that the ratio of 15 $\frac{1}{2}$  adopted by Calonne had had the contrary effect, and that it was then draining France of its silver.

The deluge of paper money, which lasted six years, concealed the movements of the precious metals until 1796, at which time the testimony is emphatic that there was no shifting tendency whatever. This fact is explained by a reference to Soetbeer's tables. The market ratio in 1796 at Hamburg was 15.65, and this was exactly the ratio fixed by Calonne, if allowance is made for the difference between the seignorage on gold and that on silver. This equilibrium continued with very slight variations till 1803, at which time Gaudin could detect no speculative movements in the precious metals. Soetbeer's quotation for

<sup>1</sup> Wealth of Nations, book i, chap. 11.

that year was 15.41. After 1803 there was a slow advance in the market ratio, not uniform, not without some declines, but nevertheless an average advance, so that soon after 1803 gold began to be exported or hoarded. The ratio was not above 16 except in three years (1808, 1812 and 1813), yet gold disappeared from circulation in France for 45 years. Chevalier, writing in 1859, says :

A change of one and a half per cent in favor of gold had sufficed, 30 to 40 years ago, to cause that metal to disappear wholly from commercial payments.<sup>1</sup>

And again :

Under the régime of the law of the 7th Germinal, year XI, gold has ceased to figure in transactions of any magnitude since it acquired an appreciable premium. People took their gold to the money changer in order to pocket the premium, and made payments exclusively in silver, as everybody knows.<sup>2</sup>

In another work Chevalier says :

In the year XI, when the law of the 7th Germinal was enacted, which established for a temporary standard the ratio of 1 to 15½ between the two metals, this ratio actually existed in the commercial world ; but little by little it changed, and soon gold came to be worth ordinarily a little more than 15½ times as much as silver — it has sometimes been worth a little above 16 times as much. This discrepancy, which has usually been about 1½ per cent (that is, one half of that which manifested itself from 1726 to 1785) would have had no effect if the prevision of Gaudin had been correct. On the contrary, it had a very considerable effect ; it sufficed to retire gold from circulation. A few years after the passage of the law of the year XI gold became so scarce that people had to buy it of the money changers when they wanted to carry that kind of cash on their journeys. In fact, the circulation of the two metals side by side, which Gaudin flattered himself that he should establish by means of the coinage of pieces denominated 20 francs and 40 francs, *had ceased to exist shortly after the year XI, and twenty-five years after that date the circulation consisted of silver only.*<sup>3</sup>

Professor Bowen, referring to the same period, says :

<sup>1</sup> Baisse probable de l'or, p. 215.

<sup>2</sup> *Ibid.* p. 220.

<sup>3</sup> La Monnaie, p. 216.

In those times when one was paid even so small a sum as 1000 francs he received his bulky and heavy money in a canvas bag and had to hire a porter or a cab to convey it home.<sup>1</sup>

These facts cannot be answered by pointing to the continued coinage of gold in France during this period. The French have always been a hoarding people and were much more so then than they are now, because there were then fewer banks and fewer means of safe investment. It is no objection in the mind of the hoarder that the money he puts away bears a premium. On the other hand gold is more easily concealed than silver because it occupies only one twenty-fourth of the space of silver for an equal value. Dupuynode estimated the private hoards of France as late as the year 1853 at one thousand million francs.

About the year 1848 the increased production of gold in Russia began to lower the price of that metal relatively to silver, so that  $15\frac{1}{2}$  to 1 again became the market ratio. Gold began to reappear in the circulation of France. Then came the discovery of gold in California and a few years later in Australia. The great outpouring of the yellow metal from the placer mines of these countries upset the French ratio on the other side of the scale. The market ratio, instead of being 15.50 to 1, became 15.21 to 1—a change of little more than  $1\frac{1}{2}$  per cent. Silver began to run out of France and gold to run in in a perfect torrent. It became necessary to coin gold pieces of ten and also of five francs. The government deemed it fitting to take some steps to prevent the exportation of silver. So a commission was appointed early in 1857 to investigate and report. This commission made the senseless recommendations that a heavy export duty should be put on silver, that dealers in the precious metals should be punished, and that assorting coins and selecting the heavier ones for any purpose whatever should be prohibited by law. These recommendations were not actually carried out, but the *Moniteur* dug up out of the dust heap of ages certain laws of similar import which it said had

<sup>1</sup> U. S. Monetary Commission of 1876, p. 146.



never been repealed. Upon the strength of this discovery prosecutions were instituted against a number of money changers, but they were almost instantly dropped. It was found that the Bank of France was doing the very thing that the money changers were accused of. It was publicly offering a premium for silver bullion over the mint ratio, and had been doing so for more than two years. The law of 1711, cited by the *Moniteur*, punished this offence by confiscation of the money so dealt in and by a fine not less than the value of the money confiscated. If the penalty had been enforced the Bank would have been fined about two milliards of francs (\$400,000,000), "if not more."<sup>1</sup>

Chevalier himself, although treating with deserved contempt the recommendations of the commission, considered the crisis a serious one and he wrote the book *Baisse probable de l'or* urging the necessity of some action. He desired that the single standard of silver enacted by the law of 1803 should be effectively maintained, and to accomplish this end he favored the plan of Crétet described above, *viz.* that the gold pieces should have a fixed weight, and that their value should be announced every six or twelve months by legislative decree. Another well-known French economist, Levasseur, while agreeing with Chevalier in his interpretation of the law of 1803, argued that the monetary revolution was an accomplished fact and that the wisest policy was to acquiesce in it. In other words, since gold had actually thrust silver aside in spite of the law, he was in favor of accepting gold as the standard. It is needless to say that events have justified Levasseur. The public were perfectly delighted to get rid of the bulky, clumsy, inconvenient coins that had oppressed and impeded them for half a century.

Statistics might be introduced here to a wearisome extent showing the flow of the two metals into and out of France in obedience to the changes of the market ratio. The details are to be found in the House of Commons report on the depreciation of silver in the year 1876 (pp. 86-91). A condensed state-

<sup>1</sup> *Baisse probable de l'or*, p. 269.

ment of the coinage is given in Block's *Dictionnaire de la Politique* (volume ii, page 338), *viz.*:

	GOLD.	SILVER.
From 1795 to 1850 . . . .	1,244,160,000 fr.	4,302,461,000 fr.
From 1850 to 1872 . . . .	6,521,442,000 fr.	827,013,000 fr.

Before 1848 [says the writer, Aristide Durand] silver was the usual money; daily payments were made with five-franc pieces. Gold, proportionally rare, had at this epoch almost gone out of the French monetary circulation, in which it was estimated that not more than one hundred million francs remained.

When the tide turned in consequence of the discoveries of gold in California and Australia, France exported in ten years (1850 to 1860) 1300 million francs of silver and imported 3000 million francs of gold, the two streams flowing side by side in contrary directions.

The minor silver coins of France up to this time were still struck in accordance with the law of 1803, that is, of full weight and fineness. Accordingly they went to the melting-pot along with the five-franc pieces, and left the country bare of small change. The inconvenience became so great that in 1864 the government asked the Corps Législatif to authorize the lowering of the fineness of all the coins less than five francs to 835 thousandths instead of 900, thus converting them all into token coins. The legislature granted this authority only as to the pieces of 20 and of 50 centimes, and limited the issue of these to 30 million francs. This was far from meeting the difficulty. A like difficulty had been experienced in Belgium and Switzerland, and this led to correspondence between the three countries touching their minor coins. This correspondence resulted in the treaty of December 23, 1865, known as the Latin Monetary Union, by virtue of which these countries, together with Italy, adopted their present token coinage of silver and limited its legal tender faculty to fifty francs. M. Achille Fould, Minister of Finance, in recommending this treaty to the Emperor Napoleon III, said:

In France all large payments, which, as is well known, were formerly made in sacks of five-franc pieces, have been of late years effected in

gold, and almost all the old five-franc pieces have been successively exported or melted down.

The last scene in this strange eventful history is known to all. The gold ratio tilted back to the other side of  $15\frac{1}{2}$  in the year 1867, but the change did not become serious until 1873. The Latin Monetary Union in 1874 restricted the annual coinage of silver five-franc pieces to 120 million francs for the four countries then composing it. In 1877 the coinage of silver five-franc pieces was stopped entirely, the governments having been authorized by the legislative authority in each to take this step. The motive impelling France and her associates to close their mints to silver was, of course, to save their gold. The existing stock of silver coin was not demonetized, but the metal silver was demonetized in France, Belgium, Switzerland, Italy, Greece and very recently in Roumania, and so it remains.

It appears from what has gone before that France did not adopt the double standard in the law of 1803, and that she never had the double standard in fact except at brief and transient periods when the market ratio, in its various rambles, happened to be about  $15\frac{1}{2}$ . So far is it from being true that the French law of 1803 held the two metals together; in fact, *they never were held together by that or by anything else*. A line representing their variations from 1803 to 1873 looks like a worm fence that has suffered in a gale of wind. Professor Laughlin has pictured it for us.<sup>1</sup> There is no evidence to show that the French law of 1803 had the smallest tendency to hold the metals together. Prior to 1785 all the countries of Europe had the double standard in law at ratios which were below 16 to 1, and the United States joined in at 15 to 1 in 1792. Yet their joint action did not prevent the ratio from rising to 16 and even higher within a very short period. When people talk to me about the double standard I say there is no such thing. It is the Mrs. Harris of monetary science. An alternate standard is not a double standard. If all Europe and America conjoined could not hold the ratio below 16, what chance is there that *we*

<sup>1</sup> History of Bimetallism in the United States, p. 160.

should be able, now and alone, to turn it back from 21 to 16? What likelihood is there that we could hold it at 21 even if we should adopt that figure?

I said in the beginning that this investigation was made for those who, while inclined to favor the free coinage of silver, would be opposed to it if they were convinced that it would expel gold from circulation. Free coinage of silver means with us the ratio of 16 to 1. The difference between this and the present market ratio is 24 per cent. As both gold and silver, each in its turn, went out of the French circulation when the difference became as much as  $1\frac{1}{2}$  per cent, anybody can judge what the effect of free coinage of silver would be, if adopted by us now.

HORACE WHITE.